AMSAT News Service Weekly Bulletins
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AMSAT NEWS SERVICE
ANS-275

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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SB SAT @ AMSAT $ANS-275.01
Lance Ginner, K6GSJ 2011 AMSAT Symposium Banquet Speaker

AMSAT News Service Bulletin 275.01
  From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
BID: $ANS-275.01

AMSAT is privileged to have Lance Ginner, K6GSJ as our banquet speaker. As AMSAT and the amateur radio community celebrate the 50th anniversary of the launch of OSCAR 1 (placed in orbit on 12 DEC 61), we look forward to Lance's remarks about how OSCAR 1 was developed and the impact of amateur radio satellites on his professional career. We will hear about the personal, technical, political, and security issues regarding the early OSCARs.

First licensed in 1954 at the age of 16, Lance started his amateur career as a novice (KN6GSJ) and quickly upgraded to become K6GSJ, the same general class license he holds today. Following his graduation from college in 1959, he joined Lockheed Missiles and Space Division in Sunnyvale, CA.

While at Lockheed, Lance became involved with Chuck Towns, K6LFH and others in Project Oscar and helped build OSCAR 1 (Launched on 12 DEC 61) and OSCAR 2 (Launched on 2 JUN 62) and test and integrate those spacecraft to the Discoverer host vehicle. OSCAR 1 became one of the first free flying 'secondary payloads' to be flown into space.

Lance's involvement with amateur radio spacecraft continued with his work with OSCAR 3, OSCAR 4, OSCAR 5 (the first for the newly formed Radio Amateur Satellite Corporation in 1970), OSCAR 6, OSCAR 7, and OSCAR 8.

Lance's involvement with the early OSCAR satellites continued with AMSAT, working with Jan King, W3GEY (AMSAT VP-Engineering), Perry Klein, W3PK (AMSAT's first President), and Dick Daniels, W4PUJ

(AMSAT Propulsion).

You are invited to read more of Lance's career as one of Amateur Radio in Space pioneers on the 2011 Symposium web page: http://www.amsat.org/amsat-new/symposium/2011/BanquetSpeaker.php

[ANS thanks the 2011 Symposium Committee for the above information]

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SB SAT @ AMSAT $ANS-275.02
OSCAR 1 Prototype Will Be Operating at the 2011 Symposium

AMSAT News Service Bulletin 275.02
From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
BID: $ANS-275.02

The AMSAT 2011 AMSAT Space Symposium will be held on Friday, November 4th through Sunday, November 6th at the Windham Hotel in San Jose, California. This year's Symposium coincides the celebration of the 50th anniversary of OSCAR 1.

Symposium Banquet Speaker and OSCAR 1 developer Lance Ginner, K6GSJ provided Bob Allison, WB1GCM of ARRL's Technical Lab and his team with technical advice to help getting the satellite operational again. Bob will also be at the Symposium and will give a brief talk on the refurbishment process.

The refurbished OSCAR-1 was on display at the ARRL exhibit area at the 2011 Dayton Hamvention. We look forward to having the OSCAR 1 prototype on display during the AMSAT Symposium as well as hear the CW transmissions (now managed by a PIC controller) in the 145 MHz band.

Additionally, the AMSAT News Service will re-run the weekly Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

Watch for the re-publication of the Project OSCAR Newsletters in the AMSAT Journal. The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

[ANS thanks the 2011 Symposium Committee for the above information]

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SB SAT @ AMSAT $ANS-275.03
Auburn University AubieSat-1 Scheduled for Launch from Vandenberg

AMSAT News Service Bulletin 275.03
From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
BID: $ANS-275.03

JM Wersinger, PhD, KI4YAU, Professor Emeritus and Director of Auburn University Student Space Program in Alabama wrote this week, "We fer-

vently request your assistance in receiving transmissions from an up-coming satellite, AubieSat-1, immediately after its launch from Vandenberg AFB, California, 25 October 2011 at 9:52 UTC. AubieSat-1 (AS-1) is an undergraduate - built CubeSat satellite developed by Auburn University.

AS-1 is designed to transmit with a power of about 800 milliwatts on a frequency of 437.475 MHz, plus or minus Doppler correction. The beacon signal, along with telemetry, will be sent using A1A continuous wave Morse code at 20 words per minute. Additional telemetry from the on board science experiment will use CW transmissions up to 60 WPM.

Based on the pre-launch orbital data provided by NASA, AS-1 will activate after deployment at 12:21 UTC, 25 October 2011. At that time, the sub-satellite point will be at 34.52 S latitude and 1.52 W longitude over the South Atlantic Ocean. Our predictions are that the first flights over the contiguous United States will begin as shown in the following table:

Orbit	AOS	Elevation	LOS	General Locale
3	15:54 UTC	>50 deg	16:01 UTC	New York
4	17:28 UTC	>26 deg	17:35 UTC	Texas
5	19:07 UTC	>48 deg	19:14 UTC	California

This information will be updated should there be launch scrubs or performance changes in the launch, and additional information will be available upon request for specific locations. Reception reports with data contents are welcomed to the following email addresses:
wersijp at auburn dot edu and tam0013 at auburn dot edu

An internet Echolink conference group is also planned to begin one-half hour prior to launch and continue until about 30 minutes after confirmation of the first receipt of signals from the satellite. Information on the conference groups title will be distributed nearer to the launch for interested stations.

Please email wersijp at auburn dot edu if you require additional information and can assist in the reception and tracking
of AubieSat-1.

Long-time AMSAT Member John Klingelhoeffer, WB4LNM serves as the Technical Advisor in Auburn University's Student Space Program.

[ANS thanks Professor Wersinger, KI4YAU at Auburn University for the above information].

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SB SAT @ AMSAT $ANS-275.04
K6LCS Satellite Presentation at the Anchorage Hamfest

AMSAT News Service Bulletin 275.04
From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
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Craig Bledsoe, KL4E of the Anchorage Amateur Radio Club (AARC) noted their September 17 Hamfest featured a first ever remotely-delivered keynote presentation by Clint Bradford, K6LCS.

In order to facilitate this full-duplex two-way video Skype conference

between Clint's studio in Riverside, California and the Anchorage Hamfest a team of hams assembled the technology to make this happen.

Led by Rich Gillin, AL4S, and Eric Thompson, N6SPP, the team installed an AT&T active remote phased-array WiMax antenna at the hamfest and aimed it towards the AT&T Alascom headquarters on Government Hill many miles away. The resultant broadband signal enabled Clint to present over a hundred PowerPoint slides through a laptop computer and projection system while his audio was delivered via a Skype connection. Two way internet video streaming allowed the audience to see Clint and he was able to see the crowd at the Hamfest.

Clint delivered a fascinating look across the spectrum of amateur satellite operations. From the earliest days of the first OSCAR satellites first launched over a half-century ago to the organization of AMSAT and today's comprehensive international efforts to get the latest amateur technologies into outer space, his presentation covered it all.

Clint also taught the basics, showing step-by-step how a beginning ham can use a simple handheld radio and antenna to work the satellites with great success.

In addition to all of the on-line satellite discussions, the AARC also conducted real-life satellite QSOs from the hamfest before and after Clint's presentation. Using AO-27, SO-50, and AO51 the host operators N6SPP and KL4E worked over a dozen amateur satellite stations in three countries. Then a number of guest operators who were attending the Hamfest got on board as well. Several visiting hams made their first satellite QSOs that day - and they were thrilled!

All-in-all everyone had a great time at the Anchorage Amateur Radio Club Hamfest, and many visitors said that they thoroughly enjoyed Clint's presentation.

Clint's satellite pages can be found at: http://www.work-sat.com

[ANS thanks Craig Bledsoe, KL4E of the Anchorage Amateur Radio Club
  for the above information]

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SB SAT @ AMSAT $ANS-275.05
ARISS Status - 26 September 2011

AMSAT News Service Bulletin 275.05
  From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
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1. First ARISS Contact for Louisiana

On Thursday, September 22, the first Amateur Radio on the International Space Station (ARISS) contact to be held in Louisiana took place between students attending Kiroli Elementary School in West Monroe and Satoshi Furukawa, KE5DAW on the ISS. Approximately 500 students were on hand for the event. Representatives from the school board, the American Radio Relay League (ARRL) and the media were also present. The contact was a featured activity held in conjunction with a well developed education plan covering space and communications. The University of Louisiana at Monroe (ULM) will open its observatory in an upcoming month to Kiroli Elementary to allow students to view various celestial bodies and events, as well as the planets and stars

within our solar system. Contact information and links to articles, video and audio may be found on this Web site: http://www.cs.ulm.edu/~pdw/KiroliARISS/

2. ARISS International Team Teleconference Held

The ARISS monthly teleconference was held on Tuesday, September 20. Among the agenda items discussed were the upcoming Houston face-to-face meeting and the HamTV project that ESA plans to support through a contract with Kayser-Italia. The Project Selection and Use committee will discuss HamTV and a second Kenwood radio for the Columbus module once the proposals are submitted. Minutes have been posted. See: http://www.rac.ca/ariss/arisstel2011-09-20.htm

3. Astronaut Training Status

Three simulated ARISS contacts were held on Wednesday, September 21. Chris Hadfield, KC5RNJ/VA3OOG spoke with youth at the Euro Space Camp in Belgium. Kevin Ford, KF5GPP contacted the Manhattan Challenger Learning Center (CLC) and Tom Marshburn, KE5HOC answered questions from students at the CLC of Indianapolis. The training sessions were terrestrial-based amateur radio contacts using ARISS equivalent equipment that will prepare the astronauts for participation in ARISS contacts during their upcoming missions on the ISS. Ford is slated to launch with Expedition 33 in September 2012 and Hadfield and Marshburn are scheduled to fly with Expedition 34 in November 2012.

4. EE Times - ARISSat Blog

On September 17, a new entry was made to the EE (Electronic Engineering) Times "Chips in Space" blog about amateur radio satellite ARISSat-1. This week the blog covers the project's lessons learned. See: http://eetimes.com/electronics-blogs/other/4227392/Chips-in-Space--Lessons-learned--Part-1

5. World Radio Magazine Covers ARISSat-1

The World Radio Magazine October 2011 issue featured an article about ARISSat-1.

To view the story, "Amateur Satellites: A Bumpy Ride for ARISSat-1 on its Way to
Space," see: http://www.worldradiomagazine.com/

[ANS thanks Carol, KB3LKI, for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS